Why does a thing exist and why is there something rather than nothing?

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Abstract

An age-old proposal that to be is to be a unity, or what I call a grouping, is updated and applied to the question “Why is there something rather than nothing?” (WSRTN). I propose that a thing exists if it is a grouping. A grouping (i.e., a unity, one) ties zero or more things together into a new unit whole and existent entity. An example of a grouping of zero things is the empty set. Next, in regard to WSRTN, when we subtract away all existent entities (matter, energy, time, space/volume, concrete and abstract entities, possible worlds, properties, minds, etc.), we think what's left is “nothing”. But once everything, including the mind of the thinker, is eliminated, this “nothing” becomes the whole amount, or entirety, of the situation. "Nothing", in and of itself, defines the situation completely. This "nothing” is everything, the entirety, the all. A whole-amont/entirety/all is a grouping, meaning that the situation previously considered to be “nothing” is itself an existent entity. It is only once all known existents, including all properties, are removed does the resulting "nothing" gain the new property of being the whole-amont/entirety/all grouping and thus an existent entity. This grouping property is inherent to "nothing" and can't be removed to achieve a more pure "nothing". That "nothing" is a "something" isn't new, but, to the best of my knowledge, the grouping explanation for how this can be is.

Introduction

The question “Why is there something rather than nothing?”, herein abbreviated as the WSRTN question, is one of the oldest in philosophy and has been asked in various forms by academics and laypeople alike for millennia. The question was formalized by Leibniz (1714) in his “Principles of Nature and Grace Founded on Reason”. Many solutions have been suggested over the years, and these have been extensively reviewed and categorized (Wippel 2011; Leslie and Kuhn 2013; Goldschmidt 2013). Most solutions tend to fall into a few general and overlapping groups, such as the following:

1. The question can't be answered because existence is just a brute fact or the question is meaningless or beyond the capability of humans to answer.

2. Existence is logically necessary and the logic for why it's necessary, but no mechanism (i.e., explanation or cause) is given. Included in this category are those solutions that state that “nothing” is not even a logical possibility.

3. Existence may or may not be necessary, but a mechanism is given for why it is here. However, the mechanism requires the existence of another thing, which is itself unexplained.

4. Existence is necessary because it is self-explaining or self-causing (*causa sui*) and therefore needs no outside entity to explain it. The reason for existence is inherent to it.

An example of the first category is that existence just is; it's a brute fact and can't be explained. This was most famously advocated by Russell (1948) and more recently by Carroll (2021). Grunbaum (2004) and Maitzen (2102) suggest the question is meaningless. And, Leslie and Kuhn (2013, pgs. 219 and 256) discuss, but don't necessarily advocate, the idea that the solution may be beyond the ability of humans to solve. Needless to say, telling someone that something just is and has no explanation or that their question is unanswerable, meaningless or beyond their ability to answer will ensure that the person will keep asking it and keep looking for solutions. My belief is that all the answers in this category are the result of giving up too easily and that the question is answerable, as I hope to show below.

The second category contains those answers that say existence is logically required, but no causal mechanism for why this is so is given . One subset of these is that "nothing" is not possible. This has been advocated by Cid (2012), Bergson (1935) and Rundle (2004). These solutions are similar to the brute fact explanation, but they try to provide a logical reason why it's a brute fact. But, the lack of a causal mechanism for this brute factness is problematic.

Category three may be the largest. Many, but not all, of its solutions also suggest that existence is logically necessary; however, they provide a "physical" mechanism in the form of some other necessary, but unexplained, thing. Possibly, the largest subset includes those where the other thing is God. Examples include Anselm's ontological argument (Anselm 1077), the various cosmological arguments (reviewed in Craig 1980) and more recent contributions such as those from Rasmussen and Weaver (2018). Another spiritual, but not God-based, subset includes those where the other thing is the "creative potential" of Dao (Chai 2019) that facilitates an interplay of nothingness and being. However, the precise nature of Dao is not well defined. Some examples of science-based explanations include that existence can be explained if one assumes the presence of the laws of nature (Lange 2013), mathematical structures (Tegmark 2008) or quantum fields (Krauss 2012). In the latter, Krauss discusses how "nothing" is unstable due to the presence of these quantum fields. A related point is that the laws of physics allow the positive energy of matter to be exactly cancelled out by the negative (attractive) energy of gravity, thus allowing a universe to be created from "nothing". But, the initial presence of the laws of physics and counteracting positive and negative energies is not explained. In a more philosophical vein, some have suggested that the answer can be found if you assume the presence of possible worlds (aka possibilities) (van Inwagen in van Inwagen and Lowe 1996), values (Leslie 2009), or possible worlds and values (Rescher 2006). Others have suggested that mind or consciousness is the source of existence (Goswami 1993). Finally, Smith (1999) discussed the ideas that closed causal loops or infinite causal chains may be a cause of existence. He suggests this is a self-causing mechanism, but I'm including this in category three because it requires the initial presence of a causal loop or causal chain.

To my mind, explaining the reason why anything exists by assuming the presence of another unexplained thing defeats the purpose of trying to answer the question in the first place. Additionally, assumptions that the laws of physics, mathematical structures and possible worlds exist and themselves need no explanation is a faith-based argument. Perhaps it's true, but no one can ever know. Nonetheless, these things would not be present in "nothing".

The final category, that existence is necessary but self-explaining or self-caused, seems to be the category that needs the least explanation and that makes the most sense. If we are ever to figure out why anything exists without assuming the presence of some other thing, a type of self-causing mechanism will be required. Nozick refers to this as self-subsumption (1981). The solution proposed here is in this category.

The above list is certainly not exhaustive but should give a general feeling for most of the existing answers to the WSRTN question. Despite all of these, however, humans keep asking the question because, for many, none of those answers have been intellectually satisfying, mainly for the reasons listed above.

The purpose of this paper is two-fold. First is to update an age-old idea that to be is to be a unity and then to apply it to “nothing” in order to suggest a novel, and hopefully intellectually satisfying, solution to the WSRTN question. The point is not an extensive discussion of what is meant by “nothing” or the question itself but instead, an attempt to actually answer it; something too often overlooked in the philosophical literature. Second, in doing this, I hope to challenge the reader's presuppositions about the situation we usually consider to be “nothing” and suggest that the grammatical definition of “nothing” as the lack of all “somethings” differs from what happens when you actually get rid of all “somethings”.

This paper is structured as follows. Section 1 explores the idea that a thing exists if it's a grouping. For those most interested in the WSRTN question, the bulk of this section can be skipped. Section 2 will apply the grouping idea to the situation we've previously considered to be “nothing” and will, consequently, provide an answer to the WSRTN question. Section 3 will cover possible objections and responses. Finally, a brief conclusion will summarize the paper.

Before beginning, some terminological notes are in order. I include quotes around “nothing” and “something” to denote the confusing, dual meanings of these words, as will be detailed in Section 2. When not in quotes, the word nothing will be meant as a quantifier and will not refer to the noun version of “nothing” (Priest, 2021) used in the WSRTN question. Finally, I will use the words “something”, "existent entity", "entity" and "thing" interchangeably to mean anything with even the most basic being or "is"ness.

1. A thing exists if it is a grouping that ties stuff together into a unit whole

Existence is often discussed in the philosophical literature in either dry, semantic terms such as "Is existence a first or second-order property?", "Are there non-existent objects" and "Can there be a thing that has being but not existence?" (Moltmann 2020; Casati and Fujikawa 2023) or vague, ill-defined terms like "essence" and "tropes". Rarely do authors attempt to explain how or why it is, *physically*, that a thing exists. That is, what is the physical mechanism for why existent things exist? One notable exception is the age-old idea that a thing exists if it is a unity, or a one as advocated by such notables as Aristotle and Leibniz. In this section, I will replace "unity" with "grouping", update and flesh out this idea and briefly review its history.

Thus, I put forward the hypothesis that a thing exists if it is a grouping (TEIIG) and that the presence of a grouping is the very essence of being in general (i.e., being *qua* being) for both concrete and abstract entities. A grouping by its nature creates a new unit whole and existent entity. The term "grouping" is similar in meaning to the more commonly used “unity”, or “one” because, after all, what does a grouping into a new unit whole do if not create a unity, or a one? A grouping is usually thought of as tying together two or more things or some “stuff” (as in the mass noun stuff) into a new unit whole, or existent entity. However, for the present argument, what is grouped, how much is grouped, what causes the grouping and whether that cause is internal or external to the grouping do not matter. As long as a grouping is present, a new unit whole and existent entity is created that is a different existent entity than anything contained within considered on its own. The grouping is manifested as a surface, or boundary, that defines exactly what is contained within and that we can see and touch as the surface of the thing. For mental or abstract entities, the surface may be better thought of as the top-level label given by the mind to a grouping of concepts, but the meaning is the same. This surface or boundary doesn't have some magical power to give existence to stuff. But, it is is the visual and physical manifestation of the grouping.

Some examples of groupings that illustrate its broad applicability are 1.) the grouping together of paper and ink

atoms to create a new unit whole called a book that's a different existent entity than the atoms considered individually; 2.) the grouping together of previously unrelated elements to create a set. We denote the grouping and surface linguistically with the curly brace symbols; 3.) the grouping of no elements at all, or “nothing”, to create the empty set; 4.) the grouping together of some amount of “stuff” such as wood, to create a board; and 5.) even the mental construct labeled the concept of a car is a grouping together of the concepts tires, chassis, steering wheel, use for transportation, etc. Here, instead of a surface, the grouping may be better thought of as the top-level label "car" that the mind uses to group other concepts together into one. However, the label still functions as a grouping of what is contained within. These examples illustrate that what is grouped (concrete entities or concepts), how much is grouped (whether multiple items or no objects at all) what causes the grouping, and whether that cause is internal to the grouping (bonds between molecules in a book) or external (power of thought to create the the mental concepts of set and car) do not matter. As long as there is a grouping, a new unit whole and existent entity is created.

To further examine the TEIIG idea, I use the example of a pile, or heap, of dirt. While many consider a heap to be an aggregate and not a true unity, I disagree and suggest that, at a core level, both have being and exist because they are groupings. The cause of the grouping doesn't matter. As long as a grouping is present, a thing exists. So, why does a pile of dirt exist? Three possibilities are:

1. The stuff inside the pile considered individually.

2. The grouping together of the stuff inside the pile, as manifested in its surface.

3. Something outside the pile.

Discussing the last choice first, if the reason for existence of the pile were something, A, external to the pile, one would then have to ask why that thing A exists? Using the same logic, it would be because of something called B external to it. Then, why does B exist? To avoid an infinite regress, there would eventually have to be some thing that exists for reasons either inside it or on its surface, and not external to it. Because that would be equivalent to asking the original question without considering option, 3, I will no longer pursue that option. Although infinite regresses are not impossible, many, including this author, reject them because they are neither parsimonious nor do they explain why anything at all exists in the first place. That is, they have less explanatory power.

So, that leaves two choices for why a thing exists: the stuff inside the pile considered individually and the grouping together of the stuff inside, as manifested in the surface. Evidence supporting the latter is as follows:

1. Suppose it is the stuff inside, the individual dirt molecules and the bonds between them, and not the grouping that gives existence to the pile. One might then ask: why does a dirt molecule exist?" Stuff-inside would say it exists because of the atoms inside the molecule and the electromagnetic force holding the atoms together. Then, why do the atoms and force exist? Stuff-inside would again say they exist because of the stuff inside them. To avoid an infinite regress into gunk of explaining that things exist because of smaller and smaller stuff inside and in order to have anything exist at all, there must be some smallest thing that exists that has no smaller components contained within. An existent entity with no smaller components inside would seem to be just a surface with nothing inside. What else would it be? And that leads back to the grouping and not the stuff inside idea. One might say that instead of there being nothing inside the smallest entity, there's continuous substance. That's possible, but then why does that continuous substance exist? It can't exist because of what's inside since it has no subunits. For explanatory power, a surface with nothing inside is superior to the continuous substance inside argument.

2. Next, a thing like a pile of dirt is not just a bunch of dirt molecules considered individually. It's the grouping together of these individual molecules into a new unit whole called a pile. All the individual dirt molecules could be spread out over some land, and they wouldn't be considered a pile; they'd just be called dirt molecules on some land. But, group them together into a little hill, and a new unit whole called a pile is created.

3. One might say that it's the individual bonds between the dirt molecules inside the pile, and not the grouping that makes the pile exist. Fair point, but three counter-arguments are:

A. It's not the bonds between dirt molecules considered individually that causes the pile to exist. It's the collection of all these bonds considered together and manifested as the surface that cause it to exist.

B. A bond is itself a grouping of two or more atoms or molecules and the attractive forces between them. For example, atom A may interact with atom B via the electromagnetic force. Without atom A, there is no bond. Without atom B, there is no bond. Without the electromagnetic force, there is no bond. The grouping of all three is needed. One might say that it is the electromagnetic force that holds atoms A and B together, so what holds the grouping of A, B and the force together, à la Bradley's Regress? The answer is that it is A, B, and the force *themselves* that holds the grouping together. The electromagnetic properties of atoms A and B generate the force, and that force then holds A and B together.

C. Bonds between molecules might explain why a thing of many components exists, but they don't explain why a thing that has no smaller components (i.e., a simple) exists. At this level, there are no smaller components to bond together. And, as explained above, a smallest entity with no smaller components is required to avoid an infinite regress while still allowing anything to exist at all.

4. Another objection might be that there are no bonds between dirt molecules that hold the pile together. Instead, the molecules are just co-located. Even if there are no bonds at all, co-location of dirt molecules into a small hill still results in a grouping of these molecules that stands out relative to the flat ground and the air near the ground and that is visible as the surface of the pile. Again, at the core level of being *qua* being, the cause of the grouping does not matter. As long as a grouping is present, a thing exists.

5. Finally, try to imagine how a thing like a pile of dirt, or a book, could exist without an outermost edge or surface. Even if your eyesight is so good you can see anything that exists no matter how small it is, what you're seeing is the surface of the thing. Is a thing really there, or even visualizable, if it has no surface? I don't think so.

In sum, a thing exists if it's a grouping, which is manifested as a surface.

Some have questioned the role of the surface in defining an existent entity. For instance, Goldstick (1979) writes in favor of the stuff-inside argument:

> "There is no more basis for identifying a hole with its periphery than for doing the same with a bump. Rather, a hole and a bump are what are contained within those spatial bounds."

This statement is flawed for the following reason. First, of course, the stuff contained within is necessary for a thing to exist, but it's not sufficient. Without the grouping together of that stuff into a new unit whole called a hole or a bump that is visually seen as the surface, or periphery, of the hole or bump, the "stuff inside" is just a bunch of individual,

unrelated stuff. Goldstick's use of the phrase "what are contained within those spatial bounds" seems to say as much. The grouping, manifested as the surface or periphery, is *"those spatial bounds"* and it defines what is "*contained within"*. Without "those spatial bounds", there would be no hole or bump to talk about. That is, without the grouping, manifested as "those spatial bounds", the air particles in the hole would be just a bunch of unrelated locations in the block of wood; not a hole, and the dirt molecules in a pile would be just a bunch of unrelated dirt molecules spread out over some land; not a pile.

How does a grouping come about? While the cause does not affect the grouping's being an existent entity, some examples of grouping mechanisms include the following. An outside-the-mind grouping can occur if there is a collection of physical force(s) holding particles together that is stronger than any force(s) pushing those particles apart. The collection of these forces and the particles themselves causes the grouping to exist. For example, a car is a collection of mechanical and chemical linkages holding the atoms of the car together against the forces of rust and decay. A pile of dirt is a collection of dirt molecules and the forces between them and on them (i.e., gravity) which together are stronger than the wind, rain or animals trying to spread the dirt molecules. A second grouping mechanism is by colocation of entities with a similar property(ies) in a surrounding area of entities with more or less of that property(ies). That is, a grouping of entities with property A exists if the density of these entities is x percent different than the density of entities with property A in the surrounding area. For instance, a cloud is a grouping of water droplets visible in a background of sky with a lower density of water droplets. The exact water droplet density differences needed to define the grouping and surface of the cloud could be determined by the scientific community. Finally, inside-the-mind groupings don't come about because of bonding or density differences but because of the neural force of thought. For example, the mental concept the mind labels "1+1=2" is formed during learning when a child uses his or her power of thought to group together the sub-concepts of one object in location A, another object in location B, moving of the objects together to be in the same location, C, and calling this new set "two", and labeling this process with the labels of "addition" and "1+1=2" provided by a parent or teacher. Taken together, the causes may differ, but as long as a grouping is present, a thing exists.

Some corollaries of the TEIIG idea include:

1. Until after a grouping is complete and what is tied together is exactly defined, there is no grouping, and the thing does not exist. Only after the grouping is complete does the thing exist. Furthermore, if what is grouped together is even slightly changed, the previous existent entity disappears and a new entity appears. This is basically a mereological essentialism approach (Chisholm 1973). A strict interpretation suggests that, for example, a rock with 1 billion molecules ceases to exist if one molecule falls off, and a new existent entity with 999,999,999 molecules immediately comes into existence because what is grouped together changes slightly. However, in normal life, humans replace this mereological essentialism by what I call "mereological everydayism" to collapse these multiple rocks into one and say it's the same rock.

2. Groupings that differ in exactly what is grouped together are different existent entities. What is grouped together includes the component parts, their arrangements, orientations and interactions (i.e., bonds and bond angles). After all, this is all contained within the grouping, and all are important parts of a thing's structure. This suggests that two entities that differ slightly in what is grouped together (e.g., slightly different components or bond angles) but that still have identical surfaces are still different existent entities. The grouping is the key and the surface is just a visual representation of that grouping. This is illustrated by the famous lump of clay versus statue paradox, which asks if a lump of clay is a different existent entity than the statue it is made into. Both contain exactly the same clay molecules,

assuming none were removed or added. However, the lump and statue are definitely different existent entities because the orientations, bonds and bond angles of the clay molecules are changed during the processes of sculpting and firing, resulting in different groupings of what is contained within for the lump and statue. This idea isn't new. Fine (1999) pointed out that a sandwich depends not just on its components but on how they are organized, and Koslicki (2013) emphasized that a water molecule depends not only on the presence of one hydrogen and two oxygen atoms but on their configurations and chemical bonds.

The components and their relationships matter in inside-the-mind existent entities, too. For instance, using the mental concept labeled "1+1=2", discussed above, if the sequence of the grouped concepts were changed to one object in location A, a set of two objects in location C, and moving these together to form the single object in location B, this would be a totally different construct than that labeled "1+1=2" and would instead be one labeled "1+2=1".

3. A thing exists only where and when its grouping exists. In regard to "where", a grouping can be located either inside or outside the mind, or, for idealists, either in that part of the mind that depicts external things or in that part reserved for internal thoughts. For simplicity, I assume there is a real world outside the mind. For example, a single cloud may exist outside the mind with its grouping and surface being defined by a scientific consensus on the density of water droplets relative to the surrounding sky needed to form a cloud, but many mental images of that cloud may exist inside the mind depending on how one's imagination visualizes its grouping and surface. The outside-the-mind cloud and inside-the-mind cloud images are different existent entities because their groupings exist in different locations. Together, the scientific consensus on what constitutes a cloud co-location and the where aspect of groupings offer a solution to The Problem of the Many, which is concerned with "the number of entities, if any, that exist in actual ordinary situations..." (Unger 1980). Another example of the where aspect of groupings is that the concept of the "number one" in Joe's head is a distinct existent entity than the concept of the "number one" in Jane's head because their groupings are in two different locations.

An example of the "when the grouping exists" aspect is that of the rock with 1 billion atoms, discussed above. Suppose this rock exists on two consecutive days. Are they the same rock? TEIIG suggests that technically they are not because their groupings exist at different times. Again though, humans instinctively use "mereological everydayism" to collapse the multiple rocks to a single rock in everyday life.

The TEIIG hypothesis has several other applications. First, the where and when aspects suggest that a grouping is an ideal candidate for a thing's "primitive thisness" (Adams 1979; Diekemper 2015) and would suffice to distinguish two otherwise indiscernible iron spheres (Black 1952) because each is a different grouping. Second, TEIIG provides an answer to the Special Composition Question (van Inwagen, 1990), which asks what factors allow some objects (A, B and C) to come together and form another object (D). TEIIG suggests that the new object D is formed only when there's a grouping of the A, B and C objects and only where the grouping is present.

This idea that a thing exists if it's a grouping that ties stuff together to form a new unit whole has a long philosophical history. Over the centuries, a grouping that forms a unit whole has also been called "form", unity, one, aggregate and bundle, but the idea is the same. In ancient times, Aristotle in his *Metaphysics* (Barnes 1984) suggested what is now called hylomorphism, or the idea that a unity of material components is needed for a thing to exist and that "form" is what unifies these components. Here, "form" is equivalent to a grouping that ties together, or unifies, particular material components to cause a new thing to exist. Centuries later, Leibniz also suggested that being is unity. He highlights this via his use of emphasis in writing to Arnauld (1687):

> "...that what is not truly *one* being is not truly one *being* either"

Aitken and McDonough (2020) write about Leibniz:

> "His core idea seems to be simply that anything that enjoys real, true, fundamental being must also enjoy real, true, fundamental unity and vice versa."

More recently, Priest (2015) made the same point:

> "...it is clear that being and unity come to the same thing. If something is an object, it is one thing; and if it is one thing, it is certainly an object...To be is to be one. So the being of something is that in virtue of which it is one."

Priest further suggests that a "gluon", which is identical with each of the components that make up the unity, is what ties together components to form a unity. For outside-the-mind existent entities, this seems to be another way of saying what was said above: that the collection of components and the forces and bonds holding them together against the forces driving them apart are what allow a grouping to be present. The grouping of components, forces and bonds could therefore be thought of as "gluons" in Priest's terminology. Overall, the TEIIG hypothesis in the guise of unity or one, has a long history in philosophy.

Taken together, TEIIG explains how and why both concrete and abstract things exist. It illustrates that whenever discussing an existent entity, it is important to define exactly what is grouped together and where and when the grouping exists. Additionally, the mind's conception of a thing is not the same as the thing itself. In the next section, TEIIG is applied to "nothing" and the WSRTN question.

2. "Nothing" is a grouping: A proposed solution to the WSRTN question

Before beginning, a few points are worth discussing. First, it is important to define "nothing" because of the wide variety of definitions used in the literature. I define "nothing" via a subtraction-type argument as the result after subtracting away, or eliminating, all: matter, energy, space/volume, time, concrete entities, abstract entities, locations, laws or constructs of physics/math/logic, possible worlds/possibilities, counteracting forces, philosophical constructs such as properties and universals, consciousness, other existent entities, and minds, including the mind of the person trying to imagine this lack of all.

Next, it's very important to distinguish between the mind's conception of "nothing" and "nothing" itself, in which the mind of the reader, your mind, would not be there. These are two different things. The "nothing" in the WSRTN question is "nothing" itself and not the mind's conception of "nothing". Of course, one can't directly visualize "nothing", but one can imagine "nothing" to the extent possible and then try to extrapolate to what it would be like if the mind weren't there. For example, close your eyes so that all you see is the blackness of the mind's eye. Then, imagine everything that exists, including the volume of the universe, shrinking down to just your body and then to just that mind's eye. Then, shrink the mind's eye and try to extrapolate to what it might be like if the mind weren't there.

Now for the proposed solution. Gefter (2014) has suggested that the seeming insolubility of the WSRTN question may be due to a flawed assumption. I agree and propose that the flawed assumption is that "nothing" and "something" are opposites. Instead, I suggest "nothing" is an existent entity, or a "something". How can this be? In regard to the question "Why is there something rather than nothing?", two possible solutions are:

A. “Something” has always been here.

B. “Something” has not always been here.

Choice A is possible but doesn’t explain anything; although, more will be said about it below. So, consider choice B. A benefit of choice B is that in order to ever provide a satisfying answer to the WSRTN question, we need to address the possibility that there was nothing”, but now there is “something”. This is choice B. So, if “something” has not always been here, then “nothing” must have been here before it. In other words, there was "nothing" and now there is "something". Now, if this supposed "nothing” before the "something" were truly the lack of all existent entities, there would be no mechanism present to change this “nothing” into the “something” that is here now. But, because we can see that “something” is here now, the *only* possible way to do this is if the supposed “nothing” we were thinking of was not in fact the lack of all existent entities, or “nothing”, but was instead a "something". This is logically required with choice B. Another way to say this is to make the analogy between the WSRTN question and the idea that you start with a 0 (i.e., "nothing") and end up with a 1 (i.e., "something"). Because you can't change a 0 into a 1, the only way you can do this is if that 0 wasn't really a 0 but was actually a 1 in disguise, even though it looks like a 0 on the surface. That is, from our traditional way of thinking about "nothing", it just looks like "nothing". But, if we could think about "nothing" in a different way and see through its disguise, we could see that it isn't actually “nothing” but is really a “something”. That is, "nothing" is a misnomer, and the situation we typically think of as “nothing” is itself an existent entity. Overall, this leads to the result that there is no such thing as absolute “nothing” and that “something” is necessary because even what we used to think of as “nothing” is a “something”. Ironically, going with choice B leads back to choice A. If what we used to think of as "nothing" is actually a "something", this would always have been true, which means that this "something" would always have been here. But, now we have a clue as to why.

An objection might be that the words "was" and "now" in the phrase “there was nothing and now there is something” imply a temporal change from “nothing” to “something”, and time would not exist until there was "something". I respond to this more fully in the next section but, briefly, these words also have a non-temporal meaning in that the human mind erroneously views switching between the two ways of thinking about the same situation as “nothing” and “something” as a temporal change from “was” to “now”.

Instead of simply asserting that "nothing" can't be a "something" and refusing to continue, it's more useful to follow the above logic and try to figure out how "nothing" can be a "something". So, how can this be? The first step is to understand why any “normal” thing like a book exists and then see if this can be applied to “nothing”. Therefore, I will use the proposal from section 1 that a thing exists if it is a grouping. As described above, "nothing" is defined as the result of subtracting away all matter, energy, space/volume, time, concrete entities, abstract entities, locations, laws or constructs of physics/math/logic, possible worlds/possibilities, counteracting forces, philosophical constructs (i.e., properties, universals, etc.), consciousness, other existent entities, and minds, including the mind of the person trying to imagine this lack of all. When we subtract away all this stuff, we think what is left is the lack of all existent entities, or "nothing". But once everything, including the mind, your mind, is gone, this "nothing" would, by its very nature, be the whole amount, or entirety, of the situation. "Nothing" would, in and of itself, completely define the situation. The inherent nature of “nothing” is that it's everything. Is there anything else besides that "nothing"? No. It is "nothing", and this “nothing” is the all. A whole-amount/entirety/all is a grouping, which means, by the definition given here, that the situation we previously considered to be "nothing" is itself an existent entity. This grouping, like other groupings, is manifested as a surface but because there is "nothing", the surface is not a structure but the whole-amount/entirety/all grouping itself . This argument implies that "nothing", by its very nature, defines itself and is therefore the beginning

point in the chain of being able to define existent entities in terms of other existent entities.

One objection might be that a grouping is a property so how can it be there in "nothing"? The answer is that it is *only once* all known existent entities, including all properties and the mind visualizing this “nothing”, are removed does this “nothing” gain the new property of being the whole-amount/entirety/all grouping. In other words, the very lack of all existent entities is itself what allows this new property to be present and thereby to allow "nothing" to be an existent entity. This whole-amount/entirety/all grouping property is inherent, or intrinsic, to “nothing” and cannot be removed to get a more pure “nothing”. Said one last way: there is an inherent unity in “nothing” because it is everything, the all.

In sum then, the answer to the WSRTN question is that "something" is necessary, or non-contingent, because even the situation we previously, and incorrectly, thought of as "nothing", is a "something. But, now there's a reason. It also means that “nothing” that lacks even the property of being a grouping is not possible. Furthermore, existence is self-causing (*causa sui)*. While these conclusions are not new, the self-causing grouping mechanism that allows "nothing" to be a "something" is, to the best of my knowledge.

If the above hypothesis is correct, then the existent entity that we previously, and incorrectly, called “nothing” would be the most fundamental building block of our existence. After all, if the starting point is “nothing”, there can be other fundamental entity. Therefore, the multi-entity universe we see around us must be derived from this one fundamental entity. Thus, the current solution is foundationalist in nature, and indicates that our existence is “well-founded” because “every non-fundamental fact is fully grounded by some fundamental fact(s)” (Brenner, 2021), with the sole fundamental fact being the existent entity previously called “nothing”. Because the starting point was "nothing", this entity would also constitute a first unit of space and a first location.

While no others that I know of have presented the grouping mechanism described above, some have suggested the idea of starting with “nothing”; although, they provide no mechanism for how “nothing” can be a “something” that does not itself need an explanation. One example of this is Plotinus' concept of “the One”. As Gerson (2011) writes:

"The self-causality of the One is also, remarkably, described as '[making] itself from nothing (oudenos).' "

How the One causes itself to form from nothing isn't clear. In the middle ages, Aquinas proposed "*productio ex nihilo"* or formation of the universe from "nothing" with God as the first and pure act (*actus primus et purus*) that caused this (Maryniarczyk 2016). This is somewhat reminiscent of the grouping hypothesis with the grouping property of "nothing" being an "act" that allows "nothing" to be a "something".

In a different vein, Hegel (1817) wrote that nothing and being were both the same and yet absolutely different and that their unity is “Becoming”, which then somehow collapses into determinate being (Hegel 1817; Houlgate 2022):

> “Nothing, if it be thus immediate and equal to itself, is also conversely the same as Being is. The truth of Being and of Nothing is accordingly the unity of the two: and this unity is Becoming.”
>
> “It is as correct however to say that Being and Nothing are altogether different, as to assert their unity. The one is *not* what the other is.”
>
> “In Becoming the Being which is one with Nothing, and the Nothing which is one with Being, are only vanishing factors; they are and they are not. Thus by its inherent contradiction Becoming collapses into the unity in which the two elements are absorbed. This result is accordingly Being Determinate (Being there and so).”

If I understand it correctly, “immediate” in the first quote refers to something in and of itself, without any perceptions attached. While somewhat similar in tone to the ideas presented here, Hegel's language is ill-defined, obscure and almost mystical, and he presents no mechanism for how nothing in its “immediacy” and “equal to itself” is the same as being or how their unity leads to determinate being.

In more modern times, Nozick (1981) wrote:

> “Is it possible to imagine nothingness being a natural state which itself contains the force whereby something is produced?”

Perhaps, the "force" Nozick mentions is the grouping aspect of “nothing” which explains why it's an existent entity? Even more recently, Priest (2021) suggested that "nothing" is the ground of all objects". He writes:

> "For if nothing were not something, there would be nothing for any object, g, to be distinct from; so g could not be an object, something."

However, this does not explain why object g is there in the first place and, thus, does not answer the WSRTN question. Zolghadr (2019) has put forward a similar argument. Finally, Bhattacharyya (2021) expanded on the mathematical concept of zero to reach a similar conclusion when he writes:

> “Finally, we argue that nonexistence may notionally constitute existence, and hence may be the fundamental.”

While his rationale is more mathematical, Bhattacharyya covers some of the same ideas presented here. Despite this long history, I believe the mechanism presented here of “nothing” being a grouping and therefore an existent entity is unique.

3. “Nothing” Is a Grouping: Objections and Responses

Some possible objections and responses are as follows.

1. Objection: "Nothing" isn't "something" just by definition. Therefore, this argument is false.

Response:

A. The definition of "nothing" as the opposite of "something" is a human definition. Humans and our minds exist and are "somethings" and, therefore, we are stuck in our existent minds at having to define “nothing” as the lack of all “somethings”. But, neither humans, our minds, nor our definition of "nothing" would be there in "nothing" itself. Therefore, whether or not “nothing” itself is a grouping and, thus, a "something, is independent of our thinking and talking about it and of how we define it. Because it is “nothing” itself, and not the mind's conception and definition of “nothing”, that we're talking about in the WSRTN question, our definition of "nothing" as not "something" has no relevance to whether or not the proposed solution is correct.

B. Were any humans there in "nothing"? No. So, we have no direct evidence as to what "nothing" truly is: the lack of "something", or a grouping and thus a "something" as suggested here. To insist that the human definition of "nothing" applies to "nothing" itself, a situation in which no humans are present is an unfounded assumption, and not the basis of a sound argument.

2. Objection: Just by talking about "nothing", I'm reifying, or giving existence to it, and mistaking my talking about it for "nothing" itself.

Response: Again, the mind's conception of "nothing" and "nothing" itself are two different things. Therefore, whether or not “nothing” itself is a grouping and, thus, a "something, is independent of our thinking and talking about it, which means that we do not reify "nothing" itself just by talking about it. Also, in order to even discuss the WSRTN question, we have to talk about "nothing" as if it's a thing. It's okay to do this because, our talking about it won't affect whether or not "nothing" itself really is a thing.

3. Objection: You say that "nothing" has the property of being a whole-amount/entirety/all grouping. But, if it has that property, it's not "nothing.

Response: Agreed. And, that's the whole point of this paper: that "nothing" has the whole-amount/entirety/all grouping and is thus an existent entity, or a "something". But, this whole-amount/all grouping aspect of "nothing" *only* becomes present once all known existents are removed. Furthermore, this grouping property is inherent to the situation we've always considered to be "nothing" and it cannot be removed to get a more pure "nothing". To the best of my knowledge, this has not been suggested before.

4. Objection: A grouping usually groups individual components, but in “nothing”, there are no components. Is that really a grouping?

Response:

A. While it's usually true that groupings tie together individual components, this is not always the case. First, for instance, is the empty set in mathematics. This is a grouping, or set, with no elements at all. Second, philosophers often talk about simples, or objects without parts. What's inside a simple? It must be either "nothing" at all or some kind of continuous stuff. While continuous stuff is possible, it appears difficult to explain. Why is it there? At least, "nothing" needs no explanation. If it's "nothing", then does this simple have a surface? If so, it's a grouping containing "nothing". Third, if we can group some things in order to form a larger grouping, or existent entity (e.g., many atoms are grouped to form a billiard ball), it seems reasonable to think that those things were also formed in the same way, via a grouping of even smaller things? To avoid an infinite regress into gunk, there must be some smallest thing with nothing further inside. That is, it's just a surface, or grouping, with nothing inside.

B. While we usually think of groupings as tying together two or more things into a new unit whole, maybe that's just because that's what we're used to from living in the world of things? Neither humans nor our minds are there in "nothing", so we can't rule out by direct observation that the whole amount/entirety/all grouping applies to "nothing", too. As discussed above, if "nothing", when even the mind of the thinker is gone, is truly the whole amount, entirety, all and complete definition of the situation, these are words for groupings. So, requiring that a grouping only applies to two or more things and not to "nothing", a place we've never been and can never go, seems unfounded.

C. To my mind, the whole amount, entirety, and all of a situation implies a unity, unit wholeness, or grouping. Where did the first and most foundational unity come from? I think it is the grouping previously, and incorrectly, called "nothing".

5. Objection: In the two choices argument for answering the WSRTN question at the beginning of section 2, the words "was" and "now" in the phrase “there was nothing and now there is something” imply a temporal change from “nothing” to “something”, but time would not exist until there was "something", so how can that be? This is also implied by the addition of the grouping mechanism that causes a transition from "nothing" to "something".

Response: First, I don't use the words "was" and "now" in the phrase “there was nothing and now there is something” in a time sense. Instead, I suggest that the words “nothing” and “something” are just two different ways people can think about that situation we've previously called "nothing", and the human mind erroneously views the switching between the different ways of thinking about this situation as a temporal change from "was" to "now" when in fact it's just switching between two ways of thinking about the same situation. Aquinas (1259-1265) made a similar point in *The Summa Contra Gentiles* when discussing how humans view the action of producing "something" from "nothing" as a motion or change. Maryniarczyk (2016) describes Aquinas' thinking with:

> "The act of creation thus conceived is something specific and incomparable with any other action. Only on account of the feebleness of our mode of cognition (secundum modum intelligendi tantum) this act can be described as a motion or change. Our reason conceives of the act of creation as something that first was not, and then appeared. In other words, explains Thomas, our reason conceives of creation as a motion or change since 'our intellect grasps one and the same thing as previously non-existent, and as afterwards existing.' "

Second, the whole-amount/entirety all grouping property is not added to "nothing" in a time-consuming process. It's an inherent feature of "nothing" but is only present once all known existents are first removed. So, there is no temporal transition of "nothing" to "something".

6. Objection: Why is “nothing” the presumed default situation?

Response: Leibniz himself (1714) regarded “nothing” as a default when he wrote:

> “After all, nothing is simpler and easier than something. Also, given that things have to exist, we must be able to give a reason why they have to exist as they are and not otherwise.”

Additionally, common sense suggests that a starting point of “nothing” needs the least, and in fact, no explanation. If “something” of any kind were the default, it would still need an explanation why it's there. As an analogy, if you buy a house and when you move in, some guy is there, you would ask “Why is this guy here instead of not here?”. You could assume that the default situation is that the house comes with this guy and not wonder why, but is that what you'd really do? No. You'd think that the default situation should be “no guy” and then try and figure out why he's there. The WSRTN question is similar.

7. Objection: I logically understand the argument being made, but I just can't visualize it.

Response: Admittedly, it is impossible to directly visualize “nothing” as an existent entity. All we can do is try and imagine "nothing" to the extent possible and then extrapolate from there as described in section 2. Because of the impossibility of direct visualization, we tend to confuse our mind’s conception of "nothing" with "nothing" itself. Indeed, I believe this has been the main obstacles to answering the WSRTN question. It has prevented us from realizing that only once all, including the mind, is gone, does “nothing” become the whole-amount/entirety/all grouping and, therefore, an existent entity.

8. Objection: If “nothing” is a grouping and, thus, an existent entity, how can this grouping that is "nothing" be manifested as the surface of a real, physical thing that composes our real, physical universe?

Response: Consider a “real”, “physical” electron, one of the particles that composes our universe. What is an electron? What is inside an election? What is it's surface or grouping that defines it and makes it real and physical? No one knows. All we really know is that an electron is an existent entity. As such, it is no different than the existent entity that has been previously, and incorrectly, referred to as "nothing". An existent entity is an existent entity. Whether this entity

is called an "electron" or the grouping that we previously, and incorrectly, called nothing" doesn't matter. Second, two existent entities that were previously called "nothing" and that are “looking at each other” would seem as real and physical to each other as two "real" electrons look to each other. It's all relative.

9. Objection: Why not go with one of the existent answers instead of this “nothing” is a grouping answer?

Response:

A. First, as mentioned in the Introduction, each of the other answers, while possible, has the problem of leaving something (either the stuff of the universe or the thing that caused the stuff of the universe) unexplained. In other words, these other answers all have some mystery stuff that exists necessarily, and no one knows why. Whether this mystery stuff is called “something”, the laws of physics, possible worlds, or God doesn't matter. It's there without explanation, and the universe is made from it. Shut up and calculate as physicists might say. This is intellectually dissatisfying. A proponent of the other answers might say that the existent entity previously, and incorrectly, called "nothing" is the same thing as mystery stuff. But is it? No, because it starts with "nothing", and due to the grouping aspect inherent to "nothing", the presence of "something" is self-explaining. The presence of an explanation that itself needs no explanation is the key difference.

B. Humans have been asking the WSRTN question for centuries and still to this day because, for many, the extant solutions are dissatisfying. I believe the reason for this is all these answers start with "something:" (i.e., mystery stuff) and always leave that "something" unexplained. Therefore, as mentioned earlier, in order to ever get an intellectually satisfying answer, we need to start with "nothing" and end up with "something". However, we have historically ruled this out as non-sensical due to the *ex nihilo nihil fit* (out of nothing, nothing comes) principle. While this principle is sound, we have stopped there and not followed the logic to say that starting with "nothing" and ending with "something" is still possible, but *only* if that "nothing" is somehow actually a "something". To ignore this is is to be forever bound by our preconceptions and never find an intellectually satisfying answer to the WSRTN question. Therefore, we have a choice: 1.) go with the extant solutions and their mystery stuff and thereby ensure that we keep asking the WSRTN question forever, or 2.) challenge your preconceptions and consider the simple mechanism presented here that starts with "nothing" and provides a self-explaining reason why that "nothing" can be a "something". I choose the latter.

Conclusions

Taken together, I propose that a thing exists if it is a grouping. Further, once one subtracts away all known existent entities, including the mind, the resulting “nothing” has the whole-amount/entirety/all grouping property that causes it to be an existent entity. It is the very lack of all existent entities that causes this new property to be present and thereby allow "nothing" to be an existent entity. This grouping property is inherent to "nothing" and cannot be removed to get a more pure "nothing". Thus, it is impossible to have "nothing" lacking even the grouping property, and, therefore, "something" is necessary, or non-contingent. The idea of an existent entity being a grouping (or unity) is not novel, but, to the best of my knowledge, its application to the WSRTN question is. The advantage of the proposed solution is that the self-explaining mechanism by which "nothing" is a "something" itself needs no explanation.

What do we do with this, or any, solution, to the WSRTN question besides satisfy our curiosity? I suggest the following. Because it starts with “nothing”, the existent entity previously, and incorrectly, called "nothing" would be

the most fundamental, or basic, of existent entities. After all, if we start with "nothing", there are no other entities. Because the universe is made of existent entities, this fundamental entity must be the foundational building block of our universe. It is ontologically prior to all following, derivative entities. In order to be physically existent, the fundamental entity must also have certain other physical properties such as dimension, shape and those related to its surface. These additional properties are all grounded in and supervene upon the initial grouping property inherent to "nothing". These properties must somehow cause the formation of all other existent entities in the universe. Therefore, by figuring out what these physical properties are, we can use them to develop a simple model of the early universe. If this model matches observations and makes testable predictions that are also validated by observation, this is the scientific method and provides evidence for the solution. This metaphysics-to-physics approach, while difficult, could be of value in gaining a deeper understanding of the universe. Without evidence, humans will argue about the WSRTN question forever. Evidence provided by, for example, the metaphysics-to-physics approach is the only way to make actual progress.

Finally, while the solution presented here may sound strange, challenge your assumptions and be difficult to visualize, it is worth noting something Robert Nozick (1981) wrote in regard to the WSRTN question:

> "The question cuts so deep, however, that any approach that stands a chance of yielding an answer will look extremely weird. Someone who proposes a non-strange answer shows he didn't understand this question....we must be prepared to accept strangeness or apparent craziness in a theory that answers it."

In sum, I suggest that the solution presented here offers a way forward in resolving the WSRTN question because it starts with "nothing" and uses a self-causing mechanism intrinsic to "nothing" for why that "nothing" is a "something". Additionally, it is possible to experimentally test it, as described above. Overall, it is a legitimate, assumption-minimal and novel solution to the WSRTN question.

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